

CLAIMS

1. An additional information processing apparatus comprising:

5 an image acquisition component which acquires input image data in which additional information is embedded; an extracting component which extracts the additional information from the input image data; and an additional information modification component
10 which generates new additional information by modifying the additional information when determining that the additional information complies with a predetermined condition, and generates copied image data by embedding the new additional information into the input image data or image data
15 obtained by removing the additional information from the input image data.

2. The additional information processing apparatus according to Claim 1, wherein:

20 said additional information contains copy control information for limiting an allowable number of times the input image data is copied; and when determining that the copy control information contains a variable value representing permission to copy
25 the input image data, said additional information modification component generates the new additional information by modifying the variable value and generates

the copied image data.

3. The additional information processing apparatus according to Claim 2, wherein said additional information modification component determines that the copy control information contains the variable value representing permission to copy the input image data when the variable value is within a predetermined range.

10 4. The additional information processing apparatus according to Claim 2 or 3, wherein said additional information modification component modifies the variable value by a smaller amount with a higher level of access authorization of a user, and modifies the variable value by
15 a larger amount with a lower level of the access authorization level of a user.

5. The additional information processing apparatus according to any one of Claims 2 to 4, further comprising a
20 recording component which stores the additional information extracted by said extracting component, wherein:

when determining that the additional information contains a flag value representing image data of an original file and the same additional information is not
25 stored in said recording component, said additional information modification component generates the new additional information to write the generated new

additional information into the recording component and generates the copied image data;

when determining that the additional information contains a flag value representing the image data of an original file and that the same additional information is stored in said recording component, said additional information modification component modifies the variable value that is contained within the additional information stored in said recording component, and generates the new additional information and the copied image data; and

when determining that the additional information contains a flag value not representing the image data of an original file, said additional information modification component does not generate the copied image data.

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6. The additional information processing apparatus according to any one of Claims 1 to 5, wherein, when determining that the additional information contains a flag value representing image data of an original file, said additional information modification component generates the new additional information by changing the flag value to a value not representing image data of an original file, and generates the copied image data.

25 7. The additional information processing apparatus according to any one of Claims 1 to 6, wherein, when determining that a level of access authorization of a user

is equal to or larger than a predetermined level, said additional information modification component can provide the copied image data having the same additional information as that of the input image data, without
5 generating the new additional information.

8. The additional information processing apparatus according to any one of Claims 1 to 7, wherein said additional information modification component generates the
10 new additional information by adding personal identification information of a user to the additional information.

9. The additional information processing apparatus according to any one of Claims 1 to 8, wherein said additional information modification component generates the new additional information by adding identification information of a system to the additional information, said additional information processing apparatus is integrated
20 in said system.

10. An additional information processing system comprising:
an additional information processing apparatus
25 according to any one of Claims 1 to 9;
a scanner which obtains the input image data by optically scanning a printed medium in which the additional

information is embedded; and
a printer which prints out the copied image data.

11. The additional information processing system
5 according to Claim 10, further comprising a data receiving
unit which receives image data transmitted through a
communication line and provides the received image data to
the image acquisition component.

10 12. The additional information processing system
according to Claim 10 or Claim 11, further comprising a
data sending unit which sends the copied image data to said
communication line.

15 13. The additional information processing system
according to any one of Claims 10 to 12, further comprising
a display unit which displays one or both of the additional
information extracted by said extracting component and the
new additional information.

20 14. An additional information processing system
comprising:
an additional information processing apparatus
according to Claim 8; and
25 an information reading unit which reads personal
identification information from a recording medium storing
the personal identification information of a user, and

provides the read personal identification information to said additional information processing apparatus.

15. An additional information processing system

5 comprising:

an additional information processing apparatus

according to Claim 4 or Claim 7; and

an information reading unit which reads access

authorization from a recording medium storing the access

10 authorization of a user, and provides the read access

authorization to said additional information processing

apparatus.

16. An additional information processing method

15 comprising the steps of:

(a) acquiring input image data in which additional information is embedded;

(b) extracting the additional information from the input image data;

20 (c) determining whether or not the extracted

additional information complies with a predetermined condition; and

(d) generating new additional information by modifying the additional information when it is determined 25 in said step (c) that the additional information complies with said predetermined condition, and generating copied image data by embedding the new additional information into

the input image data or image data obtained by removing the additional information from the input image data.